

**FFG-7 PROPULSION ENGINE CONTROL SYSTEM OPERATION TRAINER, DEVICE 20H6****TRAINING CATEGORY:**

SURFACE OPERATIONS (SHIP) (Misc)

ORIGINATING AGENCY:

CNET

SECURITY CLASSIFICATION:

Device 20H6 is unclassified.

INTENDED USE:

Device 20H6 will provide operating and casualty training for line officers and watch-standing personnel of the engineering spaces on the FFG-7 Perry-class guided missile frigate. It will be used in Propulsion Engineering Schools for hands-on training of officers and enlisted personnel who will operate the FFG-7 class propulsion and machinery systems.

FUNCTIONAL DESCRIPTION:

The 20H6 Operator Trainer consists of three (3) major subsystems, the trainee stations, the instructor station and the computer subsystem.

The trainee stations consist of the Propulsion Control Console (PCC), Electrical Plant Control Console (EPCC), Auxiliary Control Console (ACC) and the Local Operational Panel (LOP) that are simulated to have front panels which are identical to and contain the same type devices as on the actual panels of the consoles in the FFG-7 type ships. The enclosures of the control consoles contain the power supplies and the logic necessary to provide the interface between the front panel devices and the rest of the trainer.

The instructor station contains the FFG-7 bridge panel functions, the operations panel functions, the CRT display and keyboard functions, and the training problem controls. The logic assemblies and power supplies are of the same type used in the trainee stations.

The computer subsystem is based upon a Digital Equipment Corporation PDP 11/70 computer with disc/controllers, magnetic tape transport and LA-36 printer.

DIRECTORY OF NAVAL TRAINING DEVICES

Training problems can begin at any of ten (10) initial conditions elected by the instructor. Machinery casualties can be inserted at will to train for proper procedures. The reset feature allows repetition of problems with minimal training delay. The freeze control permits immediate problem stop to discuss important training situations.

PHYSICAL INFORMATION:

Number of Pieces:	Eleven (11)
Sizes:	
PCC	96" W x 38" D x 84.12" H
EPCC	96" W x 38" D x 84.12" H
ACC	71" W x 41" D x 84.12" H
LOP	96" W x 24" D x 92" H
Data Logger	
(DEC LA 36)	27.5" W x 24" D x 33" H
Instructor Station	79" W x 53" D x 47" H
Computer Processing Unit	
(PDP 11/70)	46.5" W x 30" D x 50" H
Disc Drive	21" W x 30" D x 72" H
Magnetic Tape	21" W x 30" D x 72" H
Printer Terminal	27.5" W x 24" D x 33" H
(DEC LA36)	
Bus Expansion	21" W x 30" D x 72" H
Cabinet	
Weight:	
PCC	2,800 Lbs.
EPCC	3,500 Lbs.
ACC	2,425 Lbs.
LOP	2,135 Lbs.
Data Logger	102 Lbs.
Instructor Station	800 Lbs.
Computer Processing	
Unit	800 lbs.
Disc Drive	500 Lbs.
Magnetic Tape	500 Lbs.
Printer Terminal	102 Lbs.
Bus Expansion Cabinet	500 Lbs.
TOTAL SYSTEM	14,164 Lbs.

POWER REQUIREMENTS:

120 Volts, 60 Hz., 32.8 KVA

PUBLICATIONS FURNISHED:

1. Operations and Maintenance Manual, FFG-7 Propulsion Control Console Operator Trainer Device 20H6, NAVTRADEV P-4471-1 (U).

PERSONNEL:

Instructor: Three (3) Chiefs or 1st Class PO, currently in GS rates and graduates of an instructor training course

Trainees: Class - Up to Fifteen (15)

CONTRACT IDENTIFICATION:

Manufactured by General Electric Company, Daytona Beach, FL under NAVTRASYSSEN Contract No. N61339-77-C-0142.

LOCAL STOCK NUMBER:

6930-LL-C00-4590